

CLAIMS

1. (CURRENTLY AMENDED) A method of exchanging data at a first rate between first and second point-to-point entities coupled in a wide area network by a plurality of connections including associated buffers at the first entity, through which data travels at a second rate, the first rate being greater than the second rate, the method comprising ~~the steps of~~:

parsing, at the first entity, data frames traveling at the first rate into a plurality of data frames traveling at the second rate, parsing comprising:

determining for successive buffers whether a predetermined threshold storage quantity exceeds the number of data bytes stored in the buffer, the predetermined threshold storage quantity is sixteen bytes;

selecting the first buffer determined to contain less data bytes than the predetermined threshold storage quantity;

placing a data frame into the selected buffer; and

repeating the determining, selecting, and placing steps as necessary to exchange all of the data between the first and second point-to-point entities;

sending the plurality of data frames to the second entity via the plurality of connections;

receiving and buffering the plurality of data frames at the second entity;

and

multiplexing the plurality of data frames into data frames traveling at the first rate.

2. (CANCELED)

3. (CURRENTLY AMENDED) The method of claim 2 1, further comprising the step of ascertaining whether each buffer is associated with a functioning connection.

4. (CURRENTLY AMENDED) The method of claim 2 1, wherein the buffers are FIFOs.

5. (CURRENTLY AMENDED) The method of claim 2 ~~1~~, wherein the connections are standardized E1/T1 lines and the wide area network is a telecommunication system.

6. (CURRENTLY AMENDED) The method of claim 2 ~~1~~, wherein the connections are standardized Internet Protocol lines for data transfer.

7. (CURRENTLY AMENDED) The method of claim 2 ~~1~~, wherein the connections are standardized Asynchronous Transfer Mode lines.

8. (CURRENTLY AMENDED) The method of claim 2 ~~1~~, wherein the first entity is a base station controller, the second entity is a base station transceiver subsystem, and the wide area network is part of a wireless telecommunication system.

9. (CURRENTLY AMENDED) The method of claim 2 ~~1~~, wherein the first entity is a base station transceiver subsystem, the second entity is a base station controller, and the wide area network is part of a wireless telecommunication system.

10. (CURRENTLY AMENDED) The method of claim 2 ~~1~~, further comprising the step of removing data frames from the buffers at a constant data rate for transmission on the connections, and wherein the placing step is performed periodically at a rate equal to the constant data rate multiplied by the number of buffers.

11 - 20. (CANCELED)

21. (CURRENTLY AMENDED) An interface for exchanging data at a first rate between first and second point-to-point entities coupled in a wide area network by a plurality of connections including associated buffers at the first entity, through which data travels at a second rate, the first rate being greater than the second rate, the interface comprising:

means for parsing, at the first entity, data frames traveling at the first rate into a plurality of data frames traveling at the second rate, parsing comprising:

means for determining for successive buffers whether a predetermined threshold storage quantity exceeds the number of data

bytes stored in the buffer, the predetermined threshold storage quantity is sixteen bytes;

means for selecting the first buffer determined to contain less data bytes than the predetermined threshold storage quantity; and

means for placing a data frame into the selected buffer;

means for sending the plurality of data frames to the second entity via the plurality of connections;

means for receiving and buffering the plurality of data frames at the second entity; and

means for multiplexing the plurality of data frames into data frames traveling at the first rate.

22. (CANCELED)

23. (CURRENTLY AMENDED) The interface of claim ~~22~~ 21, further comprising means for ascertaining whether each buffer is associated with a functioning connection.

24. (CURRENTLY AMENDED) The interface of claim ~~22~~ 21, wherein the buffers are FIFOs.

25. (CURRENTLY AMENDED) The interface of claim ~~22~~ 21, wherein the connections are standardized E1/T1 lines and the wide area network is a telecommunication system.

26. (CURRENTLY AMENDED) The interface of claim ~~22~~ 21, wherein the connections are standardized Internet Protocol lines for data transfer.

27. (CURRENTLY AMENDED) The interface of claim ~~22~~ 21, wherein the connections are standardized Asynchronous Transfer Mode lines.

28. (CURRENTLY AMENDED) The interface of claim ~~22~~ 21, wherein the first entity is a base station controller, the second entity is a base station transceiver subsystem, and the wide area network is part of a wireless telecommunication system.

29. (CURRENTLY AMENDED) The interface of claim-22 21, wherein the first entity is a base station transceiver subsystem, the second entity is a base station controller, and the wide area network is part of a wireless telecommunication system.

30. (CURRENTLY AMENDED) The interface of claim-22 21, further comprising means for removing data frames from the buffers at a constant data rate for transmission on the connections, and wherein the means for placing comprises means for periodically placing data frames into buffers at a rate equal to the constant data rate multiplied by the number of buffers.

31. (CANCELED)

32. (CURRENTLY AMENDED) A method of inverse multiplexing data frames arriving sequentially at a plurality of buffers coupled to transmission lines, the method comprising the steps of:

determining for successive buffers whether a predetermined threshold storage quantity exceeds the number of data bytes stored in the buffer, the predetermined threshold storage quantity is sixteen bytes;

selecting the first buffer determined to contain less data bytes than the predetermined threshold storage quantity; and

placing the next arriving data frame into the selected buffer.

33. (ORIGINAL) The method of claim 32, further comprising the step of ascertaining whether each buffer is coupled to a functioning transmission line.

34. (ORIGINAL) The method of claim 32, wherein the buffers are FIFOs.

35. (ORIGINAL) The method of claim 32, wherein the transmission lines are standardized E1/T1 lines in a telecommunication system.

36. (ORIGINAL) The method of claim 32, wherein the transmission lines are standardized Internet Protocol lines for data transfer.

37. (ORIGINAL) The method of claim 32, wherein the transmission lines are standardized Asynchronous Transfer Mode lines.

38. (ORIGINAL) The method of claim 32, further comprising the step of removing data frames from the buffers at a constant data rate for transmission on the transmission lines, and wherein the placing step is performed periodically at a rate equal to the constant data rate multiplied by the number of buffers.


39 - 49. (CANCELED)

REQUEST FOR ALLOWANCE

The foregoing describes the novel and non-obvious features of the invention in contrast to the cited references sufficient to place the claims into condition for allowance. Applicant respectfully requests consideration for allowance. Please charge any fee requirement or credit any overpayment to Deposit Account No. 17-0026

Respectfully submitted,

Dated: June 24, 2005 By:

  
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Attorney Docket No.: QCPA568CIPC  
Customer No.: 23696